

# **EXHIBIT 4**

# GRACE

## Grace Construction Products

W.R. Grace & Co., Conn.  
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September 30, 1999 (617) 876-1400  
<http://www.gcp-grace.com>

Neutocrete  
12 Trow Bridge Rd.  
Bethel, CT 06801

Enclosed please find the Material Safety Data Sheet(s) MSDSs for the products that you purchased/requested from W.R. Grace & Co. The OSHA Hazard Communication Standard requires all manufacturers and distributors to supply MSDSs to their customers for all products containing hazardous materials and provide updates when new and significant information is received.

These MSDSs provide product safety information which manufacturers and distributors must have on hand. Once a MSDS for a product has been sent, future orders will not trigger the sending of another MSDS unless changes were made or a year has passed. You are required to pass this information along to anyone to whom you may redistribute this product.

According to OSHA Hazard Communications Standard, employers must make these MSDSs available to their employees and periodically (annually or when an updated MSDS is received) review the safety information contained within. We urge to send this MSDS to the individuals in or organization responsible for health and safety practices, and to notify your employees, customers, agents, and contractors of the information so that they will be fully informed regarding health, safety, and environmental protection measures.

If you have a change of address, please notify the office from which you ordered the product so we may update our files and continue to provide you with uninterrupted mailings of our MSDSs. If you should have any questions or require any additional product safety information, feel free to contact our Environmental, Health and Safety Department.

W. R. Grace & Co.-Conn.  
Construction Products Division  
Department of Environmental  
Health and Safety

Z-01402 PROBASE



MSDS PREPARED BY: Environmental Health Dept.-Grace Construction Products  
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Cambridge, MA 02140 Ajax, Ontario, L1S 3C6  
Telephone Number for Information and Emergency Response  
In USA: (617) 876-1400 In Canada: (905) 683-8561

MSDS Number: Z-01402 000USA Cancels MSDS # Z-01324 Date: 10/30/1995

## SECTION 1 - PRODUCT IDENTIFICATION

Trade Names and Synonyms:  
(SEE SECTION 12 FOR ADDITIONAL  
PRODUCT IDENTIFICATION)

PROBASE® POOL LINER PREMIX

Chemical Names and Family: Cementitious Mixture  
Product Use: Poolbase  
Formula: Blend of Portland Cement and Vermiculite

CAS# (Chemical Abstract Service): MIXTURE-NA

### Transportation Hazard Classification

United States DOT	Canadian Regulations
PROPER SHIPPING: Not Applicable	TDG CLASS: Nonhazardous

#### NAME

HAZARD CLASS: Nonhazardous  
IDENTIFICATION #: Not Applicable  
LABEL(s) REQUIRED: Not Applicable

Surface Freight Classification: Wall Plaster

NPCA-HMIS Hazard Index:

- o Health: 2 \*
- o Flammability: 0
- o Reactivity: 0
- o Personal Protection: B,E  
(See Section 8)

## SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

INGREDIENT (Chemical Name, CAS#, & Common Name)	% By Wt.	TOXICITY DATA: LD50 & LC50 (See Section IX for Exposure Limits)
Portland Cement CAS# 65997-15-1	~60%	No Data

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**SECTION 3 - PHYSICAL DATA/CHEMICAL CHARACTERISTICS**

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<u>Boiling Point:</u> Not Applicable	<u>Specific Gravity</u> (H <sub>2</sub> O=1) Not Applicable
<u>Vapor Pressure</u> (mm Hg.) Not Applicable	<u>% Volatiles</u> Not Applicable
<u>Vapor Density</u> (AIR = 1) Not Applicable	<u>Evaporation Rate</u> (Butyl Acetate = 1) Not Applicable
<u>Solubility in Water:</u> Slight	<u>pH</u> 11 - 13 for Portland Cement
<u>Bulk Density</u> (#/cu. ft): 22 - 24	
<u>Appearance and Odor:</u> Coarse, free flowing grey powder, no odor.	

Odor Threshold:  
Not Applicable

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**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

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<u>Flash Point:</u> Not Applicable	<u>Flammable Limits:</u>
<u>Method Used:</u> Not Applicable	<u>LEL</u> NA <u>UEL</u> NA

N.F.P.A. Rating: Not Applicable

Extinguishing Media

Not Applicable  
Special Fire Fighting Procedures  
None

Unusual Fire and Explosion Hazards  
None Known

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**SECTION 5 - REACTIVITY DATA**

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Stable under normal conditions (yes or no): YES  
Conditions or Materials to avoid (which may react or cause instability):  
None Known

Hazardous Decomposition or Byproducts:  
None Known

Hazardous Polymerization:  
Will not occur

Conditions to Avoid:  
None Known

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**SECTION 6 – HEALTH HAZARD DATA & TOXICOLOGICAL PROPERTIES**

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Routes of Exposure:Inhalation:

Exposure to excessive airborne dust may cause moderate irritation to the respiratory system resulting in severe coughing and sneezing, shortness of breath and wheezing or bronchitis; it may also aggravate chronic respiratory conditions such as asthma or bronchitis.

Skin and Eye:

May cause acute and/or chronic irritation of eyes, and skin. Exposure to SKIN may produce "Cement Dermatitis" which is usually due to the alkaline and abrasive properties of cement dust and which can involve whole surface areas of the body. In a small proportion of persons, cement may cause burns without much warning since little heat is sensed, and especially if skin or product is wet.

Ingestion:

If swallowed, may cause irritation or burns to the linings of the mouth, esophagus and stomach.

Carcinogenicity According to NTP, IARC and OSHA:

Not Applicable (See Section 8 for information regarding Quartz.)

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**SECTION 7 – EMERGENCY AND FIRST AID PROCEDURES**

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In case of EYE contact, immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids apart. See a physician.

If INHALED, get fresh air immediately. If symptoms occur and persist, consult a physician.

In case of SKIN contact, flush immediately with plenty of water and dry thoroughly. After each work shift workers should shower with soap and water. Work clothing should be changed daily.

If SWALLOWED, give large volumes of water or milk to drink for dilution effect and induce vomiting by sticking finger down throat. Get medical attention. Never give anything by mouth to an unconscious person.

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**SECTION 8 - PREVENTIVE & CONTROL MEASURES**

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Warning Statements:

WARNING! MAY CAUSE IRRITATION.

- ... Contains Portland Cement CAS# 65997-15-1, Vermiculite CAS# 1318-00-9 and other associated minerals including Quartz CAS# 14808-60-7. (See information in Work Hygienic Practices Section of MSDS for additional information.)
- ... Inhalation of Portland Cement Dust may cause severe coughing and sneezing and result in temporary breathing difficulties. May aggravate chronic respiratory conditions such as asthma or bronchitis. Repeated inhalation may cause long-term and/or delayed lung injury.
- ... Cement is irritating to eyes and skin when wet or dry. May cause alkali burns resulting in damage to skin and eyes.

Precautionary Measures:

- ... Avoid creating dust.
- ... Equip mixers with dust covers.
- ... Provide adequate ventilation and respiratory protection.
- ... Avoid contact with eyes and skin.
- ... Wear skin and eye protection if contact with dry or wet material is expected.

Respiratory Protection:

Wear a NIOSH-approved dust mask (Type TC-21C-XXX) to prevent exposure above the limits specified in Section 9.

Ventilation:

- |                |   |
|----------------|---|
| Local Exhaust: | Not generally required, but should be used where available. |
| Mechanical:    | Not generally required, but should be used where available. |
| Special:       | Not Applicable  |
| Other:         | Not Applicable  |

Skin Protection:

Work gloves, barrier creams and boots to prevent irritation or drying of skin.

Eye Protection:

Safety goggles are required where exposure to excessive dust, wet or dry material is likely.

Other Protective Clothing or Equipment:

Normal work clothing.

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**SECTION 8 - PREVENTIVE & CONTROL MEASURES CONTINUED**

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Work/Hygienic Practices:

Quartz: Section 8 of this MSDS indicates that this product can contain quartz (Crystalline Silica). Quartz is a naturally occurring mineral that is commonly contained in materials that are mined from the earth's surface such as sand, limestone, clay and gypsum. Quartz is represented by the combined fractions of non-respirable sized particles and of respirable sized particles (less than ten microns in aerodynamic diameter).

Respirable sized quartz has been tied to more serious health effects (silicosis and lung cancer). Grace has not been able to detect any respirable sized quartz in the Vermiculite Component of ProBase® Pool Liner Premix based on industrial hygiene sampling of workers at Grace production facilities where high volumes of Vermiculite are produced and handled.

In addition a wet sieving analysis combined with x-ray diffractometry has been conducted on Vermiculite. Results indicate that respirable quartz is not present above the 0.1% by weight limit established by the Occupational Safety and Health Administration (OSHA) for carcinogens and in fact is below the limits of detection for the analysis. OSHA states that if the hazardous substance is contained in the product below 0.1% by weight and if exposures do not exceed permissible exposure limits then the hazards do not apply. Results of monitoring and analysis are available upon request.

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**SECTION 9 - HAZARDOUS INGREDIENTS EXPOSURE LIMITS - U.S. Only**

INGREDIENT:	Exposure Limits		
	OSHA	ACGIH	OTHER
PORTLAND CEMENT (TOTAL) CAS# 65997-15-1	PEL/TWA: 10mg/m <sup>3</sup>	TLV/TWA: 10mg/m <sup>3</sup>	---
PORTLAND CEMENT (RESPIR) CAS# 65997-15-1	PEL/TWA: 5mg/m <sup>3</sup>	---	---
RESPIRABLE DUST* CAS# NA	5 mg/m <sup>3</sup> TWA	---	---
TOTAL DUST* CAS# NA	15 mg/m <sup>3</sup> TWA	TLV/TWA: 10 mg/m <sup>3</sup>	None Established

**SECTION 10 - SPILL & DISPOSAL INFORMATION - U.S. Only**

Observe precautions noted above. Remove material for disposal. Discard empty packaging promptly. Avoid excessive handling of empty packaging which may result in unnecessary release of airborne particulates.

Waste of this product is not defined as hazardous according to the US EPA (40 CFR 261.3). Dispose of waste in accordance with applicable regulations.



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**SECTION 11 - GOVERNMENT REPORTING INFORMATION - U. S. Only**

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SARA Title III Reporting InformationTier I & II Hazard Categories:DELAYED (CHRONIC) HEALTH  
IMMEDIATE (ACUTE) HEALTHContains Extremely Hazardous-SARA III Section 302 Ingredient: NOComments:Contains Toxic Chemical Release-SARA III Section 313 Ingredient: NOComments:Other Government Reporting Requirements:Non-Hazardous Ingredient Disclosure:

Vermiculite CAS# 1318-00-9

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**SECTION 12 - PRODUCT IDENTIFICATION/TRADENAME ADDENDUM**

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The information contained in this Material Safety Data Sheet is applicable to the following products:

ProBase® Pool Liner Premix

"THE DATA INCLUDED HEREIN ARE PRESENTED ACCORDING TO W. R. GRACE & CO.-CONN'S PRACTICES CURRENT AT THE TIME OF PREPARATION HEREOF, ARE MADE AVAILABLE SOLELY FOR THE CONSIDERATION, INVESTIGATION AND VERIFICATION OF THE ORIGINAL RECIPIENTS HEREOF AND DO NOT CONSTITUTE A REPRESENTATION OR WARRANTY FOR WHICH GRACE ASSUMES LEGAL RESPONSIBILITY. IT IS THE RESPONSIBILITY OF A RECIPIENT OF THIS DATA TO REMAIN CURRENTLY INFORMED ON CHEMICAL HAZARD INFORMATION, TO DESIGN AND UPDATE ITS OWN PROGRAM AND TO COMPLY WITH ALL NATIONAL, FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS APPLICABLE TO SAFETY, OCCUPATIONAL HEALTH, RIGHT-TO-KNOW AND ENVIRONMENTAL PROTECTION."